Message

From: Steve Mazure [srm2@chrysler.com]
Sent: 1/15/2013 9:39:52 PM
To: Dalton, Joel [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5e590ca117f84cc384adcf13b68b4358-Dalton, Joel]; 'Lucky Benedict (nbenedic@arb.ca.gov)' [nbenedic@arb.ca.gov]
CC: Morrie Lee [ml90@chrysler.com]; Nakia Simon [nakia.l.simon@chrysler.com]
Subject: RE: Follow up data on the Urea Quality Sensor decision

Lucky,

With more feedback from our calibrators on your slow dilution question, I concur it is addressed. In the cases where the NOx sensor is detecting an efficiency issue and before we go into the inducement for improper DEF, we check for a "refill event":

- The calibration can now detect a refill event down to 2.6L. This is a quick detection event when the vehicle has a key-on event or is at a standstill. As stated before, it must be this minimum level to avoid incline issues. In addition,
- If the refill event is not detected at the key-on/standstill or the quantity refilled was less than the minimum quantity, as vehicle is driven there is also a backup detection feature. This looks for a change in 500mL of urea tank level which infers a refill event. This refill in conjunction with the NOx efficiency issue will trigger the improper DEF inducement.

I believe we have demonstrated a robust anti-tampering system for the 2014 MY diesel products that we are certifying. Please send your concurrence as we proceed in deferring the UQS to the 2015 MY. Thanks and Happy New Year!

Steve

From: Steve Mazure
Sent: Friday, December 07, 2012 5:45 PM
To: 'Joel Dalton (Dalton.Joel@epamail.epa.gov)'; 'Lucky Benedict (nbenedic@arb.ca.gov)'
Cc: Morrie Lee
Subject: Follow up data on the Urea Quality Sensor decision

Per our recent meetings on the subject, attached are the slides we reviewed about Chrysler/Fiat delaying implementation of the UQS until 2015 MY for our diesel models. We appreciate EPA's approval last month of this delay due to our other anti-tampering measures and look forward to continued development to a more robust UQS.

Lucky, we did review your question on the slow dilution with the calibrators. It is currently set up to first check for a 3L urea refill event as this was deemed proper for avoiding false events if parked on an incline where our Jeeps and Trucks customers will definitely experience. We are evaluating reducing the refill amount as the calibration matures if it will allow. Yes, the system will monitor and continue to increase dosing under closed loop as it detects the NOx efficiency changes. Due to some NH3 catalyst storage, there is a slight delay but still the system is OK until one of the monitors detects a threshold is passed which sends the OBD trigger.

Please let me know if you have any further questions and appreciate your concurrence on this and any other outstanding diesel-specific issues.

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